

App. No. 09/532,398

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): An image capture device, comprising:

an illumination source connected to a power source;

a simulation circuit, wherein said simulation circuit simulates said illumination source, said simulation circuit comprising a circuit output and a circuit input, wherein said circuit input is connected to said power source; and [.]

an exposure adjustment device coupled to said circuit output, wherein said exposure adjustment device compensates for changes in said illumination source as indicated by said circuit output.

Claim 2 (previously presented): The image capture device of claim 1 wherein said circuit provides an indication of the on times and the off times of said illumination source.

Claim 3 (original): The image capture device of claim 2, further comprising:

an ambient temperature sensor producing a sensed ambient temperature wherein said exposure adjustment is also changed to compensate for said sensed ambient temperature.

Claim 4 (currently amended): The image capture device of claim 3 wherein said illumination source is comprises at least one light emitting diode.

Docket No. 10991888-1

2

**BEST AVAILABLE COPY**

Appl. No. 09/532,398

Claim 5 (previously presented): The image capture device of claim 4 wherein said simulation circuit comprises a capacitor and a resistor.

Claim 6 (previously presented): The image capture device of claim 4 wherein said simulation circuit comprises an inductor and a resistor.

Claim 7 (original): The image capture device of claim 4 wherein said exposure adjustment changes said on times of said illumination source.

Claim 8 (previously presented): A method of compensating for changes in an illumination source, said method comprising:  
simulating said illumination source using a circuit, said circuit comprising an input and an output;  
applying a potential to said illumination source and the input of said circuit;  
monitoring the potential of the output of said circuit; and  
adjusting an exposure to compensate for changes in said illumination source based on said potential of the output of said circuit.

Claim 9 (previously presented): The method of claim 8 wherein said circuit provides an indication of the on times and the off times of said illumination source.

Claim 10 (currently amended): The method of claim 9 further comprising:  
sensing an ambient temperature; and [I.]  
adjusting said exposure to compensate for said ambient temperature.

Claim 11 (original): The method of claim 10 wherein said illumination source is at least one light emitting diode.

App. No. 09/532,398

Claim 12 (previously presented): The method of claim 11 wherein said circuit comprises at least one capacitor that is charged and discharged.

Claim 13 (previously presented): The method of claim 12 wherein the charging and discharging of said at least one capacitor is done through at least one resistor.

Claim 14 (currently amended): The method of claim 11 wherein said circuit comprises at least one inductor that is energized and de-energized.

Claim 15 (original): The method of claim 14 wherein the rate of energizing and de-energizing is determined by at least one resistor.

Claim 16 (currently amended): An article of manufacture comprising a program storage medium having computer readable program code means embodied therein for causing the adjustment of an exposure, the computer readable program code means in said article of manufacture comprising:

computer readable program code means for causing a computer to read an indication of an the brightness of an illumination source ~~sources~~ ~~brightness~~ from a model;

computer readable program code means for causing said computer to adjust said exposure based on said indication of said brightness of said illumination source ~~sources~~ ~~brightness~~.

Claim 17 (original): The article of manufacture of claim 16 further comprising:

computer readable program code means for causing said computer to turn on and turn off said illumination source.

Claim 18 (original): The article of manufacture of claim 17 further comprising:

Docket No. 10991888-1

4

Appl. No. 09/532,398

computer readable program code means for causing said computer to indicate to said model the on times and off times of said illumination source.

Claim 19 (currently amended): The article of manufacture of claim 18 further comprising:

computer readable program code means for causing said computer to obtain an indication of an ambient temperature; and [,.]

computer readable program code means for causing said computer to adjust said exposure based on said indication of said ambient temperature.

Claim 20 (currently amended): The article of manufacture of claim 19 wherein said illumination source is at least one light emitting diode.

Claim 21 (currently amended): The article of manufacture of claim 20 wherein said model is a series resistor-capacitor circuit and said indication of said brightness of said illumination source ~~sources brightness~~ is obtained from the voltage across said capacitor.

Claim 22 (original): The article of manufacture of claim 20 wherein said model is a series resistor-inductor circuit.

Claim 23 (currently amended): An image capture device, comprising:

illumination means;

modeling means, said modeling means producing a modeling means output that is indicative of the relative brightness of said illumination means ~~relative brightness~~; and [,.]

Appl. No. 09/532,398

exposure adjustment means for changing an exposure to compensate for changes in said relative brightness of said illumination means as indicated by said modeling means output.

Claim 24 (original): The image capture device of claim 23 wherein said modeling means has a modelling means input and said modeling means input is an indication of the on times and the off times of said illumination means.

Claim 25 (original): The image capture device of claim 24, further comprising:  
ambient temperature sensor means for producing a sensed ambient temperature wherein said exposure is also changed to compensate for said sensed ambient temperature.

Claim 26 (original): The image capture device of claim 25 wherein said illumination means is at least one light emitting diode.

Claim 27 (original): The image capture device of claim 26 wherein said modeling means comprises at least a capacitor and a resistor.

Claim 28 (currently amended): The image capture device of claim 26 wherein said modeling means comprises at least an inductor and a resistor.

Claim 29 (original): The image capture device of claim 26 wherein said exposure is adjusted by changing said on times of said illumination source.

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**